REMARKS

Applicant hereby cancels claim 44. Accordingly, claims 21-43 and 45-48 are pending in the present application.

Claims 43, 46, and 48 stand rejected under 35 USC 112, first paragraph. Claims 21-28, 30-39, 41, 44-45, and 47 stand rejected under 35 USC 102(e) for anticipation by U.S. Patent No. 5,692,966 to Wash. Claims 29 and 40 stand rejected under 35 USC 103(a) for obviousness over Wash in view of U.S. Patent No. 5,718,639 to Bouton.

Applicant respectfully traverses the rejection and urges allowance of the present application.

Applicant has amended the abstract and believes the abstract is proper.

Referring to the prior art rejections, claim 21 stands rejected over Wash. The Office Action on page 4 of the Action states Fig. 13 of Wash discloses the claimed discrimination circuitry. The circuitry of Fig. 13 is described in cols. 6 and 7 of Wash. The circuitry of Fig. 13 operates to remove extraneous reflected emitted infrared light. As noted in col. 7, lines 4-35, the background reflection is diffuse in nature and accordingly both reference detectors 17 and 18 see identical reflected intensity and the output of 17, 18 are compared by differential amplifier 52. When the output of 17, 18 are identical the output of the amplifier 52 is zero and no indication of alignment is provided. Alignment is only provided when 17 receives light sufficiently greater than light received at 18 as

reflected by the mirror of the putter. Accordingly, circuitry of Fig. 13 merely cancels the diffused reflected light and indicates alignment when detector 17 receives significantly more light.

Claim 21 recites the swung golf club *blocks the incidental light from being received using the light reception device* and the discrimination circuitry is configured to *discriminate the received reference light from the incidental light responsive to the blockage*. Initially, no blockage of incidental light is provided in Wash. As clearly set forth in Wash, both detectors receive the reflected light and accordingly no blockage as claimed is disclosed. Further, there is absolutely no discrimination responsive to the blockage as claimed. Wash provides the reflected light to both detectors and fails to disclose or suggest discrimination responsive to the blockage resulting from the swung golf club as claimed. Numerous positively-recite limitations of claim 21 are not shown nor suggested by the prior art and claim 21 is allowable for at least this reason.

The claims which depend from independent claim 21 are in condition for allowance for the reasons discussed above with respect to the independent claim as well as for their own respective features which are neither shown nor suggested by the cited art.

For example, claim 27 recites generation of the timed pulse responsive to at least one of the received reference light and incidental light being received within the light reception device, the timed pulse having a duration greater than

a duration of the reference light pulse and less and an individual one of the rise time and the fall time. The cursory teachings of the alarm signal of Wash fail to disclose or suggest the limitations of claim 27.

The art is devoid of disclosing limitations of Applicant's claim 27. The only source of the rejection may result from the personal knowledge of the Examiner. Applicants hereby request identification of prior art which discloses the features not found in the references of record or the submission of an affidavit in support of the 103 rejection of claim 27. "[A]ssertions of technical facts in areas of esoteric technology must always be supported by citation of some reference work" and "allegations concerning specific 'knowledge' of the prior art, which might be peculiar to a particular art should also be supported." *In re Ahlert*, 424 F.2d 1088, 165 USPQ 418, 420-421 (CCPA 1970).

Referring to claim 29, the Office Action admits Wash fails to teach or suggest plurality of light emission devices and a plurality of light reception devices as claimed. The Examiner relies upon the teachings of Bouton to remedy the deficiencies of Wash. The reliance is misplaced.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior

art reference (or references when combined) must teach or suggest all the claim limitations. See, e.g., MPEP §2143 (8th ed.).

Wash is directed towards alignment of a putter. Bouton is directed towards providing information regarding a plurality of different characteristics of a club. It is merely stated it is obvious to combine the reference teachings so the device of Wash can provide additional information to a golfer. Applicants disagree inasmuch as there is no motivation to modify the reference teachings.

The Federal Circuit discussed proper motivation *In re Lee*, 61 USPQ 2d 1430 (Fed. Cir. 2002). The motivation identified in the Office Action is akin to the conclusory statements set forth in *In re Lee* which were found to fail to provide the requisite motivation to support an obviousness rejection. The Court in *In re Lee* stated the factual inquiry whether to combine references must be *through and searching*. It must be based *on objective evidence of record*. The Court in *In re Fritch*, 23 USPQ 2d 1780, 1783 (Fed. Cir. 1992) stated motivation is provided only by showing some *objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art* would lead that individual to combine the relevant teachings of the references. The *Lee* Court stated that the Examiner's *conclusory statements* in the *Lee* case do not adequately address the issue of motivation to combine. The Court additionally stated that the factual question of motivation is material to patentability and can not be resolved on subjective belief and unknown authority. The Court also

stated that deficiencies of cited references cannot be remedied by general conclusions about what is basic knowledge or common sense. The Court further stated that the determination of patentability must be based on evidence.

In the instant case, the record is entirely devoid of any evidence to support motivation to combine the teachings apart from the bald conclusory statements of the Examiner which are insufficient for proper motivation as set forth by the Federal Circuit. The Office cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims but must set forth rationale on which it relied. Statements set forth in the present Office Action are akin to the alleged motivation discussed *In re Lee* and accordingly are insufficient to combine the reference teachings. The 103 rejection of claim 21 is improper without the proper motivation and Applicant respectfully requests allowance of claim 21 in the next action.

According to the motivational rationale presented in the Office Action, any teachings of a secondary reference may be combined with the teachings of a primary reference if additional information to a user is provided. Applicant submits the *Lee* case clearly illustrates such an interpretation is improper, conclusory, and not in compliance with the MPEP for establishing a proper *prima facie* case of obviousness. The mere fact that references *can* be combined or modified does not render the resultant combination obvious *unless the prior art*

also suggests the desirability of the combination. MPEP §2143.01 *citing In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

Wash is clearly only directed towards alignment of a putter. One would not look to teachings of Bouton with respect to characteristics of a swung club to modify the *alignment device* arrangement of Wash. The Examiner has improperly relied upon Applicant's disclosure to depart from the aim and purpose of Wash (i.e., alignment of a putter) to modify Wash to provide additional functionality not contemplated or considered by Wash. There is no motivation why would one concerned with alignment of a putter would look to a reference concerned with determining height, position, or speed for meaningful teachings. The only motivation results from improper usage of Applicant's disclosure. The 103 rejection of claim 29 is improper for this reason.

Claim 30 recites the incidental light comprises light not generated for use in analyzing a golf swing, and the discrimination circuitry is configured to discriminate the received reference light from an entirety of all present incidental light. As set forth in Wash, the circuitry of Fig. 13 operates to remove diffuse background reflection present at the plural detectors 17, 18. The background reflected light of the diffuse nature is clearly a result from the transmitted infrared light used to determine the alignment of the putter of Wash as set forth in col. 6, lines 30-67 of Wash. The discrimination circuitry provides no discrimination of an entirety of all present incidental light *not generated for use*

in analyzing the golf swing as claimed but is directly *concerned with distinguishing the background reflected infrared energy used to provide alignment.* Positively-recited limitations of claim 30 are not shown nor suggested by the prior art and claim 30 is allowable for at least this reason.

The claims which depend from independent claim 30 are in condition for allowance for the reasons discussed above with respect to the independent claim as well as for their own respective features which are neither shown nor suggested by the cited art.

Claim 38 recites circuitry configured to *generate a pulse corresponding to the swung golf club blocking reception of incidental light from the light reception device*, and the circuitry is configured to *compare the generated pulse with the at least one pulse of the reference light to filter the incidental light*. Wash provides absolutely no blockage of incidental light corresponding to the swung golf club as positively-recited in claim 38. Further, Wash provides no generation of a pulse responsive to the blockage of the incidental light. Wash also fails to disclose or suggest comparison of the generated pulse with at least one pulse of the reference light to filter the incidental light as specifically-claimed. Numerous positively-recited limitations of claim 38 are not shown nor suggested by the prior art and claim 38 is allowable for at least this reason.

Referring to claim 40, the Office Action on page 6 states Wash emits a timed pulse with reliance upon an alarm signal of Wash. Wash discloses

producing an alarm signal responsive to the comparison of a target signal and reference signal which is indicative of alignment of the putter face with the target point. There is absolutely no teaching or suggestion in Wash of the *alarm signal being used to discriminate reflected reference light from incidental light as claimed.* Wash also fails to disclose or suggest the specifically claimed *generating the timed signal responsive to the reference light being received within the light reception device, the timed signal having a duration greater than the duration of the reference light pulses and less than an individual one of the rise time and the fall time.* The alarm signal of Wash is merely emitted to indicate alignment to a user. There is absolutely no teaching or suggestion of the claimed *discrimination using the timed pulse* or the claimed limitations of the timed pulse *having a duration greater than the duration of the reference light pulses.* Numerous statements and unsubstantiated assertions are set forth on page 7 with absolutely no identification of reference teachings. Limitations of claim 40 are not shown nor suggested and claim 40 is allowable for at least this reason.

In the event that a rejection of the claims is maintained with respect to the prior art, or a new rejection made, Applicants respectfully request identification *in a non-final action* of elements which allegedly correspond to limitations of the claims in accordance with 37 C.F.R. §1.104(c)(2). In particular, 37 C.F.R. §1.104(c)(2) provides that *the pertinence of each reference, if not apparent, must*

be clearly explained and each rejected claim specified. Further, 37 C.F.R. §1.104(c)(2) states that the Examiner must cite the best references at their command. When a reference is complex or shows or describes inventions other than that claimed by Applicants, the particular teachings relied upon must be designated as nearly as practicable. The pertinence of each reference if not apparent must be clearly explained for each rejected claim specified. Applicants respectfully request clarification of the rejections with respect to specific references and specific references teachings therein pursuant to 37 C.F.R. §1.104(c)(2) in a *non-final Action* if any claims are not found to be allowable.

Further, there is no motivation to combine the reference teachings of Bouton with Wash. Wash is directed towards putter alignment using a specifically disclosed arrangement specifically relying upon *horizontal light* reflected from the face of the putter. Emission of vertical light would be of absolutely no concern to Bouton. Wash provides alignment indication using horizontal light and the Examiner has improperly relied upon Applicant's disclosure in formulating the modification of Wash in support of the rejection. There is no motivation to combine the reference teachings and claim 40 is allowable for at least this additional reason.

Support for the amendments may be found at least at in the originally-filed drawings of Figs. 3-14 and the associated teachings of the originally-filed specification.

With respect to the objection to the specification and the rejection of claims 43, 46 and 48, Applicants submit such claimed limitations are clearly disclosed in the exemplary circuit embodiment of originally-filed Fig. 14. In particular, the input RC network C2 and R3 inherently provides a high input impedance to the relatively slow incidental pulses and a low impedance to the relatively fast emitted reference light pulses.

The Examiner is respectfully reminded that MPEP §2163.02 (8th Edition) states the test for sufficiency of support in a application is whether the disclosure relied upon "reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter." MPEP §2163.02 (8th Edition) *citing Ralston Purina Co. v Far-Mar-Co., Inc.*, 772 F.2d 1570, 1575, 227 USPQ 177, 179 (Fed. Cir. 1985). Notably, the subject matter of the claim need not be described literally (i.e., **using the same terms** or *in haec verba*) in order for the disclosure to satisfy the description requirement. MPEP §2163.02 (8th Edition). The Examiner is respectfully reminded that MPEP §2163 I. (8th Edition) states it is now well accepted that a satisfactory description may be in the claims or any other portion of the originally-filed specification and an applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, **figures**, diagrams, and formulas that fully set forth the claimed invention (citations omitted). Further, Applicant need not disclose any theory or mechanism to

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explain why the invention works, as such theory is necessarily inherent in Applicant's description of the procedures. *See* MPEP §2163.07(a) (8th ed.) which explains that a patent application disclosing a device which operates according to a theory necessarily also discloses the theory). The mere disclosure of the circuitry of Fig. 14 is sufficient to support the new claims and Applicants request withdrawal of the rejection of the claims and the objection to the specification.

Further, the limitations of claims 43, 46, and 48 are not shown nor suggested by the prior art and claims 43, 46, and 48 are allowable for at least this additional reason.

Applicant submits herewith a copy of an IDS and 1449 which recites references which have not been initialed by the Examiner. Applicant requests initialization of all references on the properly submitted 1449 and return of the form to Applicant. With respect to the first paragraph on page 2 of the Action, Applicant is requesting initialization of the references as clearly set forth in the original IDS. A proper IDS was submitted and no deficiencies of the IDS have been identified. In particular, no copies are required as set forth in 37 CRF 1.98(d) and MPEP 609(2). Once again, Applicant requests initialization of the properly submitted references.

Applicant respectfully requests allowance of all pending claims.

The Examiner is requested to phone the undersigned if the Examiner believes such would facilitate prosecution of the present application. The

undersigned is available for telephone consultation at any time during normal business hours (Pacific Time Zone).

Respectfully submitted,

Dated: 10/3/03

By: _____
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